# LIGHTING GENERAL NOTES

- 1. CAST A GROUND ROD 5%" IN DIAMETER BY 10 FEET IN EVERY CONCRETE POLE FOUNDATION AND CONNECT TO THE POLE GROUNDING LUG VIA A #6 SOLID COPPER WIRE WITH A MECHANICAL CONNECTION AT THE GROUND ROD AND PIGTAIL SPLICE INSIDE THE POLE HANDHOLE.
- 2. ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
- 3. UNIT DUCT SHALL BE SCH 40 HDPE WITH WIRE SIZES & QUANTITIES AS SHOWN ON DRAWINGS.

  UNIT DUCT SHALL BE INSTALLED IN TRENCH UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MAKE SPECIAL NOTE FOR TRENCH BACKFILL REQUIREMENTS.
- 4. LUMINAIRES SHALL BE LEVEL & HAVE A TIGHT FIT ON MAST ARMS TO THE OWNER'S SATISFACTION. THIS WORK SHALL INCLUDE FIELD ADJUSTING OF THE LUMINAIRE WHICH WILL BE INCIDENTAL TO THE
- 5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE VILLAGE OF HARWOOD HEIGHTS BEFORE THE START OF WORK.
- 6. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE CODES.
- 7. ALL LIGHT STANDARDS SHALL BE LOCATED 2'-O" BEHIND BACK OF CURB TO FACE OF CONCRETE FOUNDATION, OR AS SHOWN ON PLANS.
- 8. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- 9. TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT THE CONTRACTOR SHALL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED.
- 10. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD UTILITIES CALL COM ED FOR LOCATION APPROVAL.
- 11. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN APPROVED BY THE OWNER.
- 12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND LIGHTING CONTROLLER FOR EXAMINATION AND CONFIRMATION WITH THE RESIDENT ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGERING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.
- 13. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR GROUNDING.
  GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE MECHANICAL TYPE UL LISTED FOR
  DIRECT BURIAL USE, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT
  ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
- 14. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE REVIEWED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATIONS HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
- 16. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR THE ELECTRICAL SERVICE FOR THE PROPOSED ROADWAY LIGHTING. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH THE ELECTRICAL UTILITY COMPANY.
- 17. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
- 18. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- 19. THE LIGHTING CONTROLLER SHALL BE CONSTRUCTED TO UL STANDARDS 508 AND 508A, AND BEAR THE LABEL "INDUSTRIAL CONTROL PANEL".
- 20. CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES. BUSHES. DRAINS AND OTHER UTILITIES AND LANDSCAPING. 21. ALL DISTURBED AREA WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE WORK MUST BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
- 22. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
- 23. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS INCLUDING ALL ABOVE AND BELOW GRADE APPURTENANCES. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

# SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
81017510	CONDUIT IN TRENCH. 1" DIA COILABLE NONMETALIC CONDUIT	FOOT	110
81017520	CONDUIT IN TRENCH, 11/2" DIA., COILABLE NONMETALIC CONDUIT	FOOT	2935
81017525	CONDUIT IN TRENCH, 2" DIA., COILABLE NONMETALIC CONDUIT	FOOT	300
81017545	CONDUIT IN TRENCH, 4" DIA., COILABLE NONMETALIC CONDUIT	FOOT	1390
81017555	CONDUIT IN TRENCH, 5" DIA., COILABLE NONMETALIC CONDUIT	FOOT	1740
81018600	CONDUIT PUSHED. 21/2" DIA., GALV. STEEL	FOOT	455
81018900	CONDUIT PUSHED. 4" DIA GALV. STEEL	FOOT	100
81022400	CONDUIT ENCASED IN CONCRETE, 5" DIA., PVC	FOOT	300
81028050	CONDUIT. BORED AND PULLED, COILABLE NONMETALIC CONDUIT. 11/2"	FOOT	1100
81028060	CONDUIT, BORED AND PULLED, COILABLE NONMETALIC CONDUIT, 2"	FOOT	100
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	8
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10605
82500560	LIGHTING CONTROLLER TYPE CB-RCS 200AMP - 480 VOLT	EACH	1
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	360
84200600	REMOVAL OF EXISTING LIGHTING UNIT NC SALVAGE	EACH	6
84200700	LIGHTING FOUNDATION REMOVAL	EACH	6
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
	LIGHT POLE, COMPLETE IN PLACE, TYPE F1	EACH	45
	UNIT DUCT. 1" SCH 40 WITH 1/C #10. 1/C #10 NEUTRAL. & 1/C #10 GND	FOOT	440
	"UNIT DUCT. WITH 6/C #6. 1/C #6 NEUTRAL. & 1/C #6 GND. 600V (XLP-TYPE USE) IN 11/2"" DIA. POLYETHYLENE - SCH 40"	FOOT	3550
	"UNIT DUCT. WITH 7/C #6, 2/C #6 NEUTRAL, & 1/C #6 GND, 600V (XLP-TYPE USE) IN 1½"" DIA. POLYETHYLENE - SCH 40"	FOOT	1780
	UTILITY MANHOLE	EACH	2

### **LEGEND**

LIGHTING UNIT TYPE F1 PROPOSED 250W METAL HALIDE LUMINAIRE ON A 6' ARM MOUNTED AT 26' ON AN ALUMINUM POLE WITH GFI RECEPTACLE AND BANNER ARMS

EXISTING VILLAGE OF HARWOOD HEIGHTS 30' LIGHT POLE TO BE REMOVED. — UD —— PROPOSED UNIT DUCT

PROPOSED RGS CONDUIT SLEEVE FOR UNIT DUCT UNDER PAVEMENT

--- PROPOSED ELECTRICAL CONDUIT PROPOSED CONCRETE ENCASED PVC CONDUIT

PROPOSED LIGHTING CONTROLLER PROPOSED COMPOSITE CONCRETE HANDHOLE 

EXISTING COM ED LIGHT

PI-CKTA CIRCUIT IDENTIFIER STA.10+25.0,3.0'B0C SETBACK (FROM BACK OF CURB TO FACE OF CONCRETE FOUNDATION, TYP.)

2½" RGS RIGID GALVANIZED STEEL CONDUIT
T OR P
TRENCHED OR PUSHED

## **CONDUIT LEGEND**

- 1 EMPTY 1" SCH 40 UNIT DUCT
- 2
- 1½" SCH 40 UNIT DUCT WITH 4/C \*6 FOR STREET LIGHTS; 2/C \*6 & 1/C \*6 NEUTRAL FOR POLE RECEPTACLES; & 1/C \*6 GROUND
- 1½" SCH 40 UNIT DUCT WITH 4/C \*6 FOR STREET LIGHTS; 2/C \*6 & 1/C \*6 NEUTRAL FOR POLE RECEPTACLES; 1/C \*6 & 1/C \*6 NEUTRAL FOR FUTURE SHELTER/SIGN; & 1/C \*6 GROUND 4
- (5) EMPTY 11/2" SCH 40 UNIT DUCT

#### CAUTION NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND/OR ELEVATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE, THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ENGINEER OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS.

REVISIONS ILLINOIS DEPARTMENT OF TRANSPORTATION **LIGHTING GENERAL NOTES** LAWRENCE AVENUE

SCALE: VERT. HORIZ. N.T.S. DATE 10/29/2007

DRAWN BY AJD CHECKED BY JPC